ASOS ERRATA SHEET NO.1 (for Electronics Technicians)
ENGINEERING DIVISION
W/OSO321:BGM

Errata to Interface Connection for the Automatic Terminal Information Service (ATIS) Automated Surface Observing System (ASOS) at un-staffed and part-time Air Traffic Control Towers (ATCT).

GENERAL

This errata sheet provides additional information for Maintenance Note 42. Installation of the Federal Aviation Administration (FAA) ATIS Interface has identified a number of ASOS sites with improperly aligned Voice Boards. To ensure that the ATIS Interface will function properly, an assigned National Weather Service (NWS) technician will be required to check the Voice Recorder/Playback board 1A2A21 for the correct output prior to or during the interface installation. Verifying the correct Voice Board output will require the technician to generate a 1000 Hz tone internal to ASOS. Generation of this 1000 Hz tone will require the technician to log on as a "System Manager." Regional ASOS specialists are responsible for providing the proper password to the assigned technician through the responsible electronics systems analysts.

Any requests by the FAA for on-site technical assistance by a NWS technician are to be coordinated with the appropriate NWS Regional Headquarters.

PROCEDURE

The following procedure is required for the Voice Recorder/Playback board check:

Test Equipment and Materials Required:

a. Oscilloscope (ASN) S100-TE403,
b. 600 ohm resistor,
c. RJ11 Jack, Surface Mounted (ASN) S100-TE351,
d. wire flat telco cable with RJ11 modular connectors on each end, and
e. Laptop Computer.

1. Connect a 600 ohm resistor between the red and green leads on the surface mounted RJ11 jack (S100-TE351).

2. Connect the 4-wire telco cable to J9 on the ACU I/O panel assembly and to the surface mounted RJ11 jack's socket (ASN: S100-TE351).

3. Setup oscilloscope channel one to the AC at 0.5V/div and sweep to 200 ms/div.

4. Connect the oscilloscope probe across the 600 ohm resistor. The probe is to be connected to the red lead and ground to the green lead. If the oscilloscope is grounded back through the AC line, the ground and probe connection may have to be reversed in order to view the audio.

5. There are two methods that may be used to generate the 1000 Hz tone needed to check the amplitude of the Voice Recorder/Playback board.

   a. At the Operator Interface Device (OID), sign on as "System Manager." Place the Caps Lock-ON and the Num Locks-OFF. From the 1 minute screen hold the **SHIFT KEY** down and type the following **~TONE** and press **ENTER**. ASOS will generate a 1000 Hz tone for 30 seconds after the current voice cycle is completed.

   b. Connect the laptop to the primary OID port on the ACU I/O panel and sign on as "System Manager." Place the Caps Lock-ON and the Num Locks-OFF. From the 1 minute screen hold the **SHIFT KEY** down and type the following **~TONE** and press **ENTER**. ASOS will generate a 1000 Hz tone for 30 seconds after the current voice cycle is completed.

6. Observe the oscilloscope during the period that the 1000 Hz tone is present and verify that the amplitude displayed on the oscilloscope is 2 ± 0.2 V p-p.

7. As a final check, use a Butt set to verify the audio output clarity at J-9.

8. If the amplitude is not within the 2 ± 0.2 V p-p, order a replacement Voice Recorder/Playback board. Use ASN, S100-1A2A20 when ordering from the National Logistics Supply Center. The Voice Recorder/Playback board must be returned to the National Reconditioning Center for repair.

NOTE

The OID used in the ATCT for appending voice information to the weather broadcast, must be configured as either OID-1 Local or OID-2 Secondary, and the Voice Port designation on the hardware configuration page must match this configuration.

Original Signed

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